JOHNT HIGHWAY
RESEARCH PROJECT

TRAFFIC SPEED REPORT NO. 103

្រី Webernard



TRAFFIC SPEED REPORT NO. 103

T0: J. F. McLaughlin, Director

Joint Highway Research Project

December 21, 1977

H. L. Michael, Associate Director

File: 8-3-3

Joint Highway Research Project Project: C-36-10C

The attached Progress Report No. 103 on Traffic Speeds is the report of the October-December 1977 quarterly study of free-flowing automobile and truck speeds on rural, tangent, level sections of Interstate, 4-lane and 2-lane and on urban interstate highways in Indiana. The report has been prepared by Mr. J. R. Mekemson, a Graduate Instructor in Research on our staff, under the direction of Professor H. L. Michael. The data collection was directed by Mr. G. K. Stafford of our staff.

The results indicate that the average speed of passenger cars and trucks has increased since the July-September 1977 study. The average speeds of passenger cars and of heavy trucks were found to be 1.5 mph and 0.8 mph greater, respectively, than for the previous period. The percentage of all vehicles travelling more than 5 mph above the speed limit increased to 36 percent while 11 percent were more than 10 mph above the 55 mph limit.

Copies of the report will be sent to the Federal Highway Administration and the ISHC for review, comment and acceptance as partial fulfillment of the objectives of this HPR Part I Study. Copies of the report are requested for release to the Indiana State Police and the Indiana Office of Traffic Safety as a normal procedure for these reports.

Respectfully submitted,

Thorstel L. Muchael

Harold L. Michael

Associate Director

HLM:ms

FROM:

cc: A. G. Altschaeffl

O. M. Bevilacqua

W. L. Dolch R. L. Eskew

G. D. Gibson

W. H. Goetz M. J. Gutzwiller G. K. Hallock

D. E. Hancher

K. R. Hoover R. F. Marsh

R. D. Miles

P. L. Owens

G. T. Satterly

C. F. Scholer

M. B. Scott

K. C. Sinha C. A. Venable

L. E. Wood

E. J. Yoder

S. R. Yoder



Interim Report

TRAFFIC SPEED REPORT NO. 103

by

J. R. Mekemson Graduate Instructor in Research

and

G. K. Stafford Traffic Engineering Technician

Joint Highway Research Project

Project No.: C-36-10C

File No.: 8-3-3

Prepared as Part of an Investigation
Conducted by

Joint Highway Research Project Engineering Experiment Station Purdue University

in cooperation with the
Indiana State Highway Commission
and the

U.S. Department of Transportation Federal Highway Administration

The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the Federal Highway Administration.

Purdue University West Lafayette, Indiana December 21, 1977

		TEC	HNICAL REPORT S	TANDARD TITLE PAG
1. Report No.	2. Government Acce	ssion No. 3, 1	Recipient's Catalog	No.
JHRP-77-23				
4. Title and Subtitle	<u> </u>	5. F	Report Date	
77.55.0			December 21,	1977
TRAFFIC SPEED REPORT NO.	103	6. F	Parforming Organizat	ion Code
7. Author(s)		8. F	erforming Organizat	ion Report No.
J. R. Mekemson and G. K.	Stafford		JHRP-77-23	
9. Performing Organization Name and Address		10.	Wark Unit No.	
Joint Highway Research Pr		11	Contract or Grant N	
Civil Engineering Buildin	ng		IPR-1(15) Par	
Purdue University West Lafavette Indiana	47907		Type of Report and	
West Lafayette, Indiana 12. Sponsoring Agency Name and Addrese			Interim Repo	rt.
Indiana State Highway Cor	nmission		ctober-Decer	
State Office Building 100 North Senate Avenue		14.	Sponsoring Agency (Code
Indianapolis, Indiana 46	5204			
15. Supplementary Notes				
Conducted in cooperation	with the U.S.	Department of Tra	insportation.	Federal
Highway Administration. ways".	Planning Stuc	ly titled "Speed II	renas for Inc	ilana High-
16. Abstroct			· · · · · ·	
This report is another	in the conti	nuing study of spe	eds of vehic	cles on
Indiana highways. Observ	ations of spo	t speeds were take	n on interst	tate, four-
lane and two-lane highway	s throughout	the state during t	he October-D	December 1977
quarter.				
Analysis of the speeds	showed the o	verall average spe	ed for all v	vehicles
was 58.7 mph. The overal	1 average spe	ed for passenger o	ars and all	trucks was
59.3 mph and 58.1 mph res	spectively. T	hese overall speed	ls are an ind	rease over
the results of the July-S	September 1977	quarter (Speed Re	port No. 102	2) of 1.2 mph
for all vehicles, 1.5 mph	for all pass	enger cars and 0.8	mph for hea	ivy trucks.
17. Key Words		18. Distribution Statement		
Speeds, Highway Speeds, R	ural Highway	No restrictions.	This docum	ont is
Speeds, Speed Trends, 55		available to the		
Effect		National Technic		
		Springfield, Vir		
19. Security Classif. (of this report)	20. Security Clas	sif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclas	sified	43	



TRAFFIC SPEED REPORT NO. 103

This report is an analysis of spot speed observations made during October-December 1977. All observations were made of free-flowing vehicles on level, tangent sections of rural and urban highways during daylight and under favorable conditions.

The speed monitoring stations for each highway classification are divided into two groups. The first group is identified as "control stations" and were at the same locations on selected Federal and State highways as used in previous annual studies. These "control stations" are used in each quarterly study. The second group is selected at random for each quarterly study.

Fourteen speed monitoring stations were used for the study reported herein. Seven of these stations were the control stations noted above. The other seven stations were selected at random.

Stations were classified as two-lane, four-lane, rural interstate, or urban interstate highways. A representative sample of spot speeds was obtained at each station in each classification. The site locations were as follows: (See Figure A).

Rural Interstate Highways

*RI-6 ((I-65)	
*RI-21	(I-69)	
RI-22	(I-69)	
**RI-26	(I-80 &	90)

7.5 miles north of junction of SR 160 1.6 miles south of junction of SR 18

7.3 miles north of SR3 interchange.

3.75 miles east of LaGrange-Elkhart Co. line @ mile post marker 112

Four-Lane Highways

*4L-17	(U.S.	52)
*4L-32	(U.S.	30)
4L-1 (U.S.	41)
4L-23	(U.S.	31)

Just east of Co. Rd. 475W, near Klondike 2.9 miles west of Wanatah city limit sign

2.55 miles south of SR 64

3.95 miles north of Howard-Miami Co. line

Two-Lane Highways

*2L-18 (U.S. 35) 2.5 miles east of junction of I-69

1.1 miles south of junction of SR 234

5.0 miles south of SR 39 and 67

2.75 miles east of Gibson-Pike Co. line

Urban Interstate Highways

East of White River Bridge Township Line Road Bridge

*2L-54 (U.S. 231)

2L-55 (SR 67)

2L-63 (SR 64)

*UI-6 (I-65)

UI-5 (I-465)

*Control stations

**Toll Road



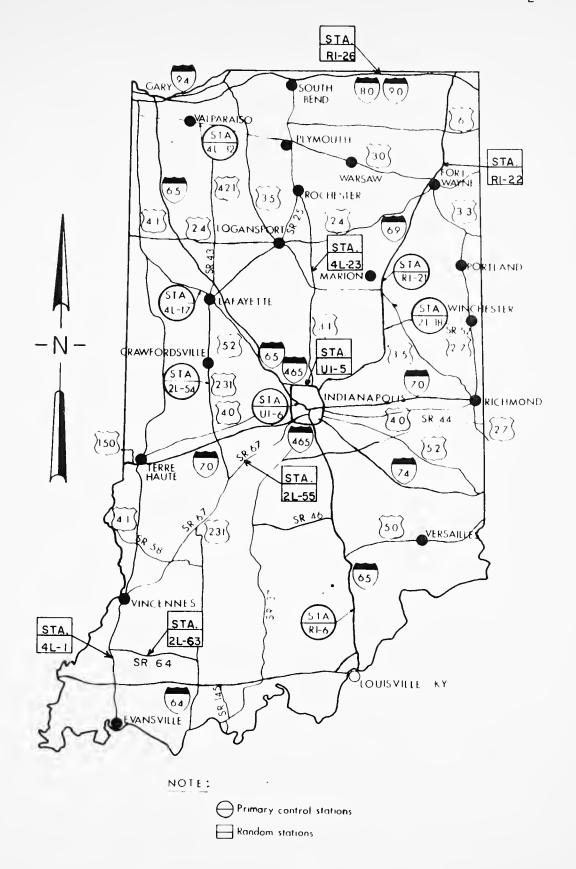


FIGURE A , LOCATIONS OF SPEED-STUDY STATIONS

		1

The vehicles were classified as Indiana or Non-Indiana Passenger Cars and Light (less than 5000 lbs. gross weight) or Heavy (equal to or more than 5000 lbs. gross weight) Trucks. The analysis was performed as classified and combined, passenger cars or trucks.

The maximum speed limit in Indiana is 55 miles per hour, both on Interstate and other rural highways.

Equipment and Field Procedure

The observations for this study were obtained by use of a Radar Speed Meter. The meter was located in a van type vehicle parked as a disabled vehicle on the right shoulder. The van was equipped with one-way vision windows on the rear and side facing traffic so that approaching vehicles could not observe the speed measurement process. The observers were also equipped with CB radio equipment so as to monitor possible radio notification of the speed measurement and of police vehicles in the area. When any such incidents occurred speeds were not taken for at least a following 15 minute period. Such periods rarely occurred. There was rarely indication, in fact, that motorists were ever aware of the presence of a speed measuring station while it was in operation.

The speed was measured at a distance from the van so that the angle of measurement with the highway center line was always less than 10°. No corrections of speeds were necessary at these small angles. At the beginning of the study the accuracy of the meter was checked and any constant discrepancy of readings was corrected accordingly.

RESULTS OF ANALYSIS

The data collected were analyzed and are summarized in Tables 1 to 14 in the Appendix. Tables 15, 16, 17 and 18 summarize the data for rural interstate, four-lane, two-lane and urban interstate highways, respectively. Table 19 is the summary for all highways. Tables 20 through 34 are summaries in an FHWA format which is desired.

The average speed for each classification of vehicles on each type of highway for this study was as follows:



			<u>Other</u>	
	Interstate		Four Lane	Two Lane
	<u>Urban</u>	Rura1	Rural	Rural
Passenger Cars:				
Indiana	59.8	61.2	58.4	57.7
Non-Indiana	59.0	61.8	59.6	58.4
All Passenger Cars	59.7	61.5	58.6	57.8
85 Percentile (all)	62.9	66.1	62.9	63.0
Trucks:				
Less than 5000 lbs.	59.1	60.1	57.5	56.7
5000 lbs. or more	56.6	61.3	57.8	54.7
All Vehicles:				
Average	58.8	61.3	58.2	56.8
85 Percentile	62.9	66.0	62.7	62.3

The percent of vehicles exceeding the speed limit (55 mph) for each classification of vehicle and each type of highway was as follows:

	Inter	state		
	Urban	Rura1	Four Lane	Two Lane
Passenger Cars:				
Indiana	85.5	90.2	72.5	65.2
Non-Indiana	77.4	92.8	80.7	65.6
All Passenger Cars	84.5	91.5	73.7	65.2
Trucks:				
Less than 5000 lbs.	75.2	82.1	65.0	56.1
5000 lbs. or more	65.6	88.7	72.0	47.0
All Vehicles:	77.8	89.5	71.8	59.0



The percent of vehicles traveling more than 5 mph above the speed limit (exceeding 60 mph) for each case was as follows:

			Other		
	Inter	state	Four Lane	Two Lane	
	Urban	Rural	Rural	Rural	
Passenger Cars:					
Indiana	39.3	49.4	32.3	29.8	
Non-Indiana	33.9	55.9	40.7	28.1	
All Passenger Cars	38.6	52.8	33.6	29.7	
Trucks:					
Less than 5000 lbs.	35.8	45.8	28.6	27.2	
5000 lbs. or more	20.7	57.3	29.1	15.7	
All Vehicles:	33.3	53.8	31.6	25.8	

The percent of vehicles traveling more than 10 miles per hour above the speed limit (exceeding 65 mph) for each case was as follows:

	Inter	state	<u>Other</u> Four Lane	Two Lane
	Urban	Rural	Rural	Rural
Passenger Cars:				
Indiana	10.7	17.9	8.0	9.5
Non-Indiana	4.8	20.3	11.0	10.9
All Passenger Cars	10.0	19.2	8.5	9.6
Trucks:				
Less than 5000 lbs.	8.8	18.5	8.6	7.8
5000 lbs. or more	1.7	20.2	7.3	2.9
All Vehicles:	7.5	19.5	8.2	7.6

Summary and Conclusions

The overall average speeds for all vehicles and for all passenger cars in this study were found to be 58.7 mph and 59.3 mph, respectively. The overall average speeds for heavy trucks and for all trucks were found to be 58.2 mph and 58.1, respectively. These overall speeds show an increase over the results of the July-September 1977 quarter of 1.2 mph for all vehicles and 1.5 mph for all passenger cars. The overall average speeds for heavy trucks and for all trucks were respectively 0.8 mph and 1.1 mph more than the results for the July-September 1977 study.

Table A presents a comparison of the overall speed results with that of the previous two studies. The 85th percentiles and the average speeds have increased considerably when compared to the previous July-September 1977 study.

A comparison of October-December 1977 speed data with that for other recent periods for several types of highways for passenger cars and trucks is shown in Tables B, C, D, and E. Speeds increased on all highway types for both passenger cars and trucks except for heavy trucks on Urban Interstate where a slight decrease was recorded, when compared to the July-September 1977 study. The largest increase occurred on Rural Interstates.

and the second

Parties of the

So the part of some of the control o

and the second second second

TABLE A

COMPARISON OF THE OVERALL SPEED RESULTS

	OctDec. 1977	July-Sept. 1977	April-June 1977
Average			
All Passenger Cars	59.3	57.8	58.1
Heavy Trucks	58.2	57.4	58.6
All Trucks	58.1	57.0	58.0
85 Percentile:			
All Passenger Cars	64.0	62.6	63.0
Heavy Trucks	63.4	62.5	63.3
All Trucks	63.3	62.3	63.0
15 Percentile			
Heavy Trucks	52.0	51.1	52.9

 $\begin{tabular}{lll} TABLE & B \\ AVERAGE & SPEEDS & ON & INTERSTATE & HIGHWAYS & (URBAN) \\ \end{tabular}$

	OctDec. 1977	July-Sept. 1977	April-June 1977	JanMar. 1977	
Passenger Cars:					
Indiana	59.8	58.7	58.7	57.0	
Non-Indiana	59.0	59.0	59.1	57.1	
All Passenger Cars	59.7	58.8	58.8	57.0	
85 Percentile (all)	63.8	62.7	62.9	61.5	
Trucks:					
Less than 5000 lbs.	59.1	57.7	57.7	55.9	
5000 lbs. or more	56.6	58.2	58.9	56.2	

TABLE C

AVERAGE SPEEDS ON INTERSTATE HIGHWAYS (RURAL)

	OctDec. 1977	July-Sept. 1977	April-June 1977	JanMar. 1977
Passenger Cars:				
Indiana	61.2	60.1	60.4	60.1
Non-Indiana	61.8	60.1	60.5	61.0
All Passenger Cars	61.5	60.1	60.5	60.5
85 Percentile (all)	66.1	64.5	64.8	64.7
Trucks:				
Less than 5000 lbs.	60.1	58.4	59.3	58.0
5000 lbs. or more	61.3	59.7	60.9	59.3



TABLE D

AVERAGE SPEEDS ON OTHER FOUR-LANE HIGHWAYS

	OctDec. 1977	July-Sept. 1977	April-June 1977	JanMar. 1977
Passenger Cars:				
Indiana	58.4	57.0	57.1	56.7
Non-Indiana	59.6	58.1	57.8	58.7
All Passenger Cars	58.6	57.2	57.2	57.0
85 Percentile (all)	62.9	62.0	61.9	61.7
Trucks:				
Less than 5000 lbs.	57.5	55.7	56.7	54.8
5000 lbs. or more	57.8	56.6	58.0	54.8

TABLE E

AVERAGE SPEEDS ON TWO-LANE HIGHWAYS

	OctDec. 1977	July-Sept. 1977	April-June 1977	JanMar. 1977
Passenger Cars:				
Indiana	57.7	55.9	56.3	56.5
Non-Indiana	58.4	55.9	57.3	58.3
All Passenger Cars	57.8	55.9	56.4	56. 7
85 Percentile (all)	63.0	60.9	61.4	61.8
Trucks:				
Less than 5000 lbs.	56.7	54.9	55.6	55.8
5000 lbs. or more	54.7	53.5	55.1	53.5

_	
4	
-	
<	
_	
_	
4	
ш	
ш	
SP	
10	
•	
	i
	i
	Į
_	ì
	i
	1
ш	ı
	ı
AB	
=	
4	

	HIGHWAY	9 - I	ro	100/	LOCATION	7.5 north	th of S	R 160				
0. OF LANES		PE 0	SURFA	CE_Concre	rete				WEATHER	Cloudy		
BSERV. ATE 1	T10N	00	S S		LA	ST PREV DATE TIME	1008 08 8-10-7 91:57	SERVATI	ON (SPE	ED REPOR	- 0N	102)
	- /0:	200	3PI		1		0				6 6 6	i i i
	19		TONE I	EI IU	I I I I I I I I I I I I I I I I I I I	NOIANA	V	LL PRFS-	2500 2500 2500		>5000	LBS.
OBSERVALION	LASI		S	<u> </u>		W	LAST	Ш	LASI-	. 1		ш
NUMBER OF VEHICLES	246-	223-	13	10	10	-26-07	184	10	S	10	I C	50 81
IANDARD DEVIATION	400	4 = 7 4 2 -			4 4	4 101	101	N K	47	6+133-	4 6	1001
24 MPH	0-0	0				00	0		0	0	0	
34 APH				0	0	0		0	0	0	0	01
32 MPH	O	0	0	0	0	0	0	0	0	0	0	0
ERCENT 44 MPH	q	· 1	0	0	0	-0	-0	1.0-	-0	2-0-	0	-7
P 49_MP	2	4:-	4	80	-67	0	1-1-1-	3.5	168	40	∞	
CLES SATE	2	7	4	7.5		7.7.	10.3		14.0-	510		727
KAVELING JYJERE	80.1	80.7	196-	78.9		83.2	25.23	81.0		:10		100 100 100 100 100 100 100 100 100 100
ESS THAN 69 MPH	94.3	94.6	95.	95.3						16		1 4
_74_MPH_	-28	-92-6	97.	99 - 2		0	_	0	0	0	01	-1
29-MPH-	466	00.00	100±	4		900			010	히		-
7100 7100 7100 7100	100.0		100.001	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100,00	100000
DIRECTION NB				4 1		1						
NUMBER OF VELICLES		112	-11-	- 1		- 10	į.			- 10		
AVERAGE SPEED	22.4	60.52	2=3	<u>0 ± 4</u>		Ó					- :	-
NUMBER OF VEHICLES		111	1 1	61		1 (1 1		899	
AVERAGE SPEED	62-3	60 - 81	آب آ			2-09	61=30	59-49	61-6	-61.57-		-
												10

TABLE__2_SPEED DATA

,	1	077		PRES-		60.45		C	ا <u>ن</u> ا -	ات ا ا		ابه	2.3	11.3	7-77	76.7			ا ان	9	100		72	62.61	1	- 61	35=25
	Cloudy	RT NO. 1	2025<	ACT	127	60,10	20 =	0) () () ()	러	0		•	•1	4	21.00	5	3	ات	اب				61.30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	59	58±60
1	Pt	ED REPO	KS C L ES	1 67 1 67 1 61 1 61	517	59.80	- 64	0	0	CH	0	0	1.8	7.	4	8C.4	7	0	ات	9	ات		2	60.83	1	1	
2,	WEATHER	ON (SPE 1 AM SE 2:46 PM	TRUC < 5 C C	1 5	기 년 디	58.60	60	0	0	니 다 나 나 나	0		442-	•	2	89-6	• •	4	000	000	0			52.20	1	2	C)
of S	1	27- 11:3 12:3	1 1	PRE) 	60.26	-37	C	<u></u>		0		2=1-			-27.8									1 1 1	QCI I	100 100 1
. mijes. south		VIOUS OF E 7-27- E 10:49			1 1 2 2 1 2	55.70	100 100 100	0	0	ات ا ا	0		-2.2.	₩		83.9	5	9	ات ات	100.0	100.0		5	08709		100	
נות מַלּבוֹ -		AST PREV DATE	INDIANA	i OK I OK I OK	1	61.50	2	0	0	0	0		0		v.i	78.3		O					(62.1	1 1 1	9	56.09
CCATION	crete	۲	 2 0 2	\ \ \ \	א 200 נו ע	09 09	117	0	0	0	0		0	5	(L.)	85.9	_ M	4	#) (00)	1) i	75	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	I	-61-00
<u> </u>	ACE_Concr	. IZ	1014	1 0 U	1	61.03	5 - 4	0	0	[] 		اب ا ا ا	0			79.5			CH	10			. !	5 = 5		7	<u>59,2C</u>
!	CF SURF	AM SB	I SI	-	17	09	4.56	3	1 1	1 1				23	51.	86	96	486	100.	1000	100.0		90	160±3E		1	
>	TYPE	7 - 11:22 \M - 12:	 	P R R	72	61.25	4.90	1 1 1	1	1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 4	907		934	98	100.	100	100		11	62	1	1	58-65-
x	1 1 1	VATION 11-21-7 10:29 -		V -	S 26.2	ı i	97-4-N			1		- P	4	*1 *** *** *** ***	6 6 7	85.	95.	986	98	100	100		S	60-3		S	60-1
1=21	ES	S CESER DATE_ TIME_			VEHIC		EV 1AT	24-BP	29_MP	34 MP	39_MP	44 BP	45.MP	54 MP	59 AP	₩.	JE 59	24-MP	29_MP	8 4 RP	SE UN ON ON	ЙВ	الا اح	EED	.SB	N K	[편] [편]
ATION	NO. OF LAN	1 + 1				AVE. SPEED	STANDARD					PERCENT	0 F	EHIC	RAVELI	AT OR	ES				1	IRECIION	NUMBERLOF	AVERAGE SP	DIRECTION	NUMBER	AVERAGE

		-	

TABLE_3_SPEED DATA

	4 1 1	O EBS	1	25 4 3 7 T	-1 1 21 1	0			200	31.5		5 7 9 5 - 7		ا اث		ال ال	7 9	<u> 60.16</u>	1 1 1	53	61=52
		∧ I <						0	5	30							0	0	1	0	
change Cloudy		PRES	1 11	29.26-7	ri i 11 i	d			1	56.48		4:	1	000		100	1 1	60-63			
3 Intel												0	C	0							
of SR RVATTO		PRI	zi (O)	60 - 58 - 7	-1 -1 -1					37.3	14	9	01	0	CHO) -			-		
s_south		A								0 0			0			0	٥	0	1	0	
3 mile	DATE TIME	PRIANA	ij <u>←</u>	-62 <u>-65</u> -) •	0	50			32.7	1 0	~	() -		-	ا• ان	i .		1		-62-46-
rete		11 F	0			0					0	0		0	0	0		0		0	
L CCA	 	AIS.	1 1	61.79	1	0				20.00	76.2	0	S	CI		1		61=3		56	-62=59_
F SURFA	ASSENCE	21 4	-1 & W -1		 	0								ا ا ا		7				1	
HIGHWAY _ I _ 6	1:57 AN		1212	46	74 4 1	0	ojo	0	4	ン ✓ _•	•	0/1	- 28	000	_4 ⊜।		14				5
HIGH	22-7 28 51	1 4		0		0	-0		0		0	0	ن	0		5	0			_ :	0
4	* — ' ത' ത ' ' '	1 9		CRPH >	2 4 4 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	29 MP	41 W	1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	45 MP	210 212	1 4 P	6 5 MP	74-MP	28-MP	710	としている。	<u> –</u> ш		S 18	ш	اللا
LANE	: : :		E S L D E L		21 21 21 21 21 21		1	ENT		CLES	,	THAN	•	1	1	14011	기 IC VI IC	AGESP	CIION	ER _ 0	AGE_SP
STATION NO. OF	i i i i i i i i			AVE	E1 E1 -1			RC		VEHIO	0	LESS				10	NUMB	AVER	DIRE	N N	A VER



TABLE_4_SPEED DATA

IGHWAY I-80 & 90 LCCATION 3.75 miles east of LaGrange-Elkhart Co. Line at 112 mile post marker; TOLL ROAD TYPE OF SURFACE CONCRETE	N LAST PREVIOUS OBSERVATION (SPEED REPORT NO) LAST PREVIOUS OBSERVATION (SPEED REPORT NO)	ALL STORE OF STORES STO	ENILASIENI	62-06						1100 ±0	יין האיזה יין בריין האיזה יין בריין האיזה ביין האיזה ביין האיזה ביין האיזה ביין האיזה ביין האיזה ביין האיזה בי ביין האיזה ביין בריין האיזה ביין	64	9-	
1-80_8_90 E CF SURFACE	10N 16-77 34 - 1:48 PM EB 09 - 3:13 PM WB	ALL PRES INDIAN	T ENT LAST C AST C AST	62 <u>-06</u>				0 - 2 8 3 C C C C C C C - C	98.45			61.80		
STATICNRI=26 NO. OF LANES_4	THIS CESERVATI DATE		AUMBER OF VEHICLES	DARD DEVIATION	H d d d d d d d d d d d d d d d d d d d	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	49 49 BP	3W 55 DNI 1	SS THAN 65 MP	10141 E E E G G G	DIRECTION EB		NUMBER OF VE AVERAGE SPEE	



TABLE__5_SPEED DATA

Location_150_feet_east_of_county_road_475W	ACEAsphalt	LAST PREVICUS CBSERVATION (SPEED REPORT NO. $\underline{192}$) DATE $\underline{5-9-77}$ TIME $\underline{9:36-11:15-AM-WB}$ $\overline{11:20-AM-1:04-PM-EB}$	FR CARS	IANA SOUC LES SOUC LE	PRES- PRES- PRES- PRES- PRES- FRES- FRES- FRES-	264 32 17 151 150 89 93 62 5				0 0 0 0 0 0	2-23-21-8	<u> </u>	2 - 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	<u> </u>	5=755=76 7 =76 7=875=772=771=77	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	5=521 <u>6=351</u> 2=2272=222=2272=2272=227 <u>6=3515=3615=3612=23</u>	5=3515=5515=6517=5577=5575=551-5=75-5=75110=5612=76	3			135 15 26 26 26 26 26 26 26 26 26 26 26 26 26	<u>58_0158_1060_3354_5055_8254_6055_8055_8</u>	150	<u> </u>
0 f C 0	1	BSERV 7 -11: AM -	1	ALL	от СС П		55.	-1			2	5	14	300	77 2	767	2000	200		1000) - - - -	6	055-	2	155
eas	1 1 1	1005 19:3			4	-	10/17 10/17 10/17	ال ا•	1 1 1 1		1	 	133		77	76	- 1 - 1 - 1 - 1 - 1 - 1	77	77	700	1 1 1 1	1 (54-	1 1	1 1 1
50_fe	1	ST PR DA TII		NOLA	S S S S S S S S S S S S S S S S S S S	1	10 T	1 1 1 1	1		1	1	1	را ال 1	47-	1 07		310			ot)})} -	1 (60=3	1	2565
TICN	ها الح	1		111	U	35		1 2 2 2 2			-	0	M	4 (2)	001 001 001	7 7 7 0		300	ان ات	네) [드)))	1	5001		57.80
10	E A S		100	4 2	w u	26	57.6	7252	1		c	•	*! 	<u>26</u> :	- 62 =	70	٠ ا	775	100 T		• 	13	1 % S	120	57.20
52		 	12		-	246	120 to 1	اد اد	и́ з т	i 🕶 i		4 . 5	₩.i	5	2.4	- 	이 ()	222	000		ار ۱۹ ۱۹ اد	131	55.90	14.0	727
U. S	TYPE (1:26-AM 1:44-PM	1 1	J 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S	1000	- 52 = 25	+ 	 	0	0	• 	7.5	_25_	61.	. ₩ ()()	<u>~</u> !	4 5 5 E			이 기 기	144	58.15	14	-22-73-
HIGHWAY	!	110N 29-77 29-1-1	1 1	AP	V	278	56.80	70027	7	1 d	- 7	4.0	1843	28-8	71.2	+	*! •Cl	22.	000)) (146	56.20		57.40
ON4L_12	NO. OF LANES -4	THIS CESERVA DATE 11 TIME 9: 12:			OFFRVATIO	CHICARTARAMANIANI - CERTANIANI	AVE. SPEED (PPH)	SIANDARD DEVIALLON	111111111111111111111111111111111111111	HUM 75	39 PP	ERCENT 44-MPH	46 BPH	LES 54-MPH.	VELING _59_MPH_	OR64_MP	ESS THAN _69_MPH_	74-MPH-	79-MPH-	# 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TRECTION FB	NUMBER OF VEHICLES	AVERAGE SPEED	DIRECTION WG	

141

TABLE____SPEED DATA

STATION4L	77.7	HIGHW	AY US	30	רככ	CATION_2	9 mile	S West	of Wana	tah cit	y limit	sign	
NO. OF LANE	S4		TYPE CF	F SURFA	CE_Asph	alt		 	-	WEATHER	Cloudy	1 1	1
THIS	CESERV DATE	VATION 11-18-77 9:28-1	0:16 AM 1:23 AM			LA	ST PREV DATE TIME	10us cB 7-20-7 9:05- 10:31-p	SERVATI 70:17 M-12:	ON (SPEI) PM EB	ED REPOR	RT NO. 1	05.
		LAST - 180 - 57.50			AN IN	NON-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				S S S S S S S S S S		S S S S S S S S S S S S S	1010 511141
STANDARD D	NSSS THE	00000	5 2 63	4.51	W	41	91 1 1 1	K)	72 -	13	7	201 1 1 1	2
ENT CLES ELING R		1 1 10100		1 1 1 4 4 9 9		1 1 4 4 4 4		1-121-0151-	14100-17 1 4 4 1 1 1		1 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		
LESS THA			100000000000000000000000000000000000000						816101010				101010111
NUMBER IONING THE COLOR IN THE		57.60 -57.60 -57.60 -57.50	61.00 61.00 61.00 61.00 61.00		10001	57.50 -57.50 -57.50 -57.50 -57.50	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	151 152 172 172 172 172 172 172 172 172 173 173 173 173 173 173 173 173 173 173	600 82	56.89	12 12 12 12 12 12 12 12	59 29 20 20 20 20 20 20 20 20 20 20 20 20 20	10 10

TABLE_7__SPEED DATA

	Cold	NO	1 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	W W 4		1001			00	-5 = 5	-5770	-97520		91	4	1000	1 4	4		i		1	065	4) 201 201 201
1	ATHER Cloudy.	(SPEED REPORT	TRUCKS SCOOLESS	K I	68.75 0	7979			020	<u>0</u> <u>2</u>	0 - 5 - 5 5				ni a	9*86	o	O	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		- "		0 t	
south of SR 64	W.E.A	OBSERVATION		х і п ш	57:5	IVI.				-05-6	9	<u>25</u> <u></u>	901 C	ا الح ا	6	2 2 = 2	1 4			163			01	2 - 58 - 75
2.55 miles south of SR		LAST PREVIOUS DATE TIME	I I I I I I I I I I I I I I I I I I I	ス III III III II II II II II II II II II	10	5+55			0	i	0 3 4	•		4) 4) (•1	70=70		1 0	1	029			1	0 60.59
LCCATICN	.ce			7 N	10	101	0		0	9					مارد		i C	اب ا				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	61	58.24
HIGHWAY_US_41	TYPE CF SURFA	0 PM SB	1 1 14	n Zi	233	1001		0	0	1 1	ار ا	(A)	- 4 67 (* 	ેં ≻ ાલ	7 9 55-	0			11	901		-	0
) 4 3 3	4	SERVATION TE 11-10-77 ME 1:24 - 2:1 2:29 - 3:2	778	F & S	U I	NOIL	I I I I I I I I I I I I I I I I I I I		Z L	E H	HOI	HOL	기		I I I I I I I I I I I	Z: 2				- 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1CLES0_	0
STATION4L_1_	ANES	THIS CEDA		- OBSERVAII	ER-OF-VEH	STANDARDIDEV	24	IM	301	ERCENT _4	F 49	HICLES _ 54	RAVELING _ 59	0R	SS THAN 65	J1 ()	100	500	DIRECTION MB	NUMBER OF VER	SPEED	DIRECTION SB.	NUMBER OF VEH	AVERAGE SPEED



TABLE__3_SPEED DATA

Lime		ON	250 CC - 1 ES - 2	FRES		75 495 - 5	220-2-0-1		0	٥	•1	*1	7	-022 -2	7		اد دا د	4	91 C	ا• ار		0 57.69		0 47	95999
Miami County	R Cloudy	EED REPORT	CKS CO LBS	PRE		58.67	202-5	0	0	0	1.6	3.1	23.4	59.4		598				의 이 이	7	58.63			2.82
of Howard	WEATHE	RVATION (SP	181	RES-	173	17	7 2 7		0		1.7	5.8		9-29				ol (DIC	10	7	8.03		760	2.510
iles north		VIOUS OBSE) 	10						ا ا ا ا		0		0				200			5 0 2			
CN 3.95 m	1	LAST PRE DAT TIM	1 11	PRE	0	410	7=	0	0		00-	-1		1-64-1	اه` ان∩		40) (ار ا	• 1	12	0 61.17	i I		30 T 0 9 T 0 T
LCCATI	E Concrete		CABS	PREST	231	59-03	01	30		0		1:2	18.2	55-0	20 - 0		>10		ع اب)i	111111	59.36	1	118	-58:71
31	CF SURFA(AM NB	PASSENGE INDI		5	2	NI 0	0	0	0	ال ال	5	2	9		0	7					7	1	0	3
- ر	TYPE	10N 17-77 30 - 11:20 10 AM - 12	ALL	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	2 - 6 0 5	67	0	0	0	0	01:		023-	00 	61	210	011		77-		5 65 0	d d d - 1		501
ivi I I	ES 4	S CESERVAT DATE 11-1 TIME 10:			VEHICLES	(PPH)	VIAT V	-29-APH	3 4 PP	39	M-24	W 5 5	54 M	59 139	7	E O	d E 7	Z :	710	EI N	ᆋᄟ)) 4) () ()	SB	VEHICLES	(의
TATION4	NO. OF LANI	THI			NUMBER OF	SPEED	STANDARD D				PERCENT	0 F	HICLES	2		LESS THAN				10		AVERAGE	DIRECTION	UPBERLO	AVERAGE

	•	

TABLE__9_SPEED DATA

	02.0		
loudy	T NO		
Pt. C	ED REPOR	N	
WEATHER	ON (SPE		
of I-69	SERVATI		
s east	7-27-7 7-27-7		
.5 mile	ST PREV DATE TIME		
LCCATICN_2	١ ه		
LCCAT			
35 F SURFAC			
US PE C	28 PM		
HIGHWAY	11 10N -21-77 37 - 3:		
-18 S -2	CESERV/ DATE 11 TIME 1:		
STATION2LT	THIS	A T A K E B B B B B B B B B B B B B B B B B B	

TABLE__10_SPEED DATA

				•	1							
STATION26=54-	HIGH	HIGHWAY_US_2	231	LCCAT	ICN_1	.l mile	s south	of SR	234	1	1	1 1
NO. OF LANES		TYPE C	F SURFAC	CE_ASP	halt	 	1 5 6 1 1	-	WEATHER	Cloudy	 	1 1
THIS CESI	ERVATION E-11-15-77 E-10:43-AM	71:37	14 15 15 15 15 15 15 15 15 15 15 15 15 15		LA	ST PREV DATE TIME	1cus cB 7-29-7 -10:14	SERVATION AMENIA	ON (SPE	ED REPO	RT NO. I	05-,
	A		ASSENGER I INDIA		IN		V	1 1 16		المناز المارات	0033	ه الــــا ا
OPSERVATION.	L AS	2 ZI	S			א הייה	S				S	
NUMBER OF VEHIC	ES241	2127	216	12	2-13	10	19	216-	8010	1.96	4-17	150
M M	028 5 NO	6.073	5.810	ا ا	6.040	-27-26-	- 22 - 60 - 60 - 60 - 60 - 60 - 60 - 60	6.923	7.200	7777	5.880	6.163
2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	000	OC				1 1						
77		1 1										1 1
50000	(N)		6	ا ان ا		0	0	۱ ۱	1	1 T	1	7
ERCENT _ 44_M	H50	7	5	•1	•	- 1	4	4	M	7	5	4
E-57-	H10±8	7	4	7.	4 4	9	7	-	9	ارم اه	31	-1 Ol
EHICLES 54-M	H38±6	100	9100	911	41	•1 •1	اه د احه	91	010	-10	4 L	4 الحا اه
ELING JALIAN	9 70 H		70			01 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00	52.47	-ic	- KA 27	4 7 7 0	7-75-	100
ESS THAN 69 M		94	1 00	1 4	י וי	10	000	1 ~	1 9	1 0	0	10
M 52	H 100 0	99.1	1001	 	000	000	1 00 I	100	7	9	100	000
79 B	11000	99-	100.	6	000		0	01	000	6	0	00 00
¥1 − 7 00	H100-0	2- 88	1001	- 65	ا ان	01	01	9	ان	3	ol	0 000
E 68	H100_0	اه ات	900	Ö				2	4 0 0 0	9	ان ان	
DIRECTION-NB-		1	1	- 1	1 1	8 8 8	- 1	- 1				
NUMBER OF VE	LES110.	106-	102	ic	i i	i		106	43	747	220) () () ()
기 기 기 기	20-170	Z = Z	7 1 7	1	754=75-	-02+20-	-1	7) 1 7		01 *)	0 1 0 1
NUMBERLOFLVE	131	1 1	114	6	1 1		6	1-1	4	64	 	61
AVERAGE SPEED	55-40	55.86	1 0 1 1 1	55.85	55.80	55.91	55-80-	56-32	55.30	į		:

T.			

•	
-	
⋖	
0	
_	
	ì
4	ŧ
ш	ŀ
٥.	
S)
	ı
-	١
_	ı
	١
	ŧ
ш	1
_	•
8	
⋖	

STATION24_55	HIGHWAY_SR_	75 F	LOCATICN_5 miles	south of SR 39	8 67	
NO. OF LANES2	TYPE C	F SURFACE_ASP	phalt		WEATHER Clear	
THIS CESERVA DATE_1 TIME_9	1-11-77 :3311:31-AP		LAST PREVI DATE_ TIME_	OUS OBSERVATI	ON (SPEED REPOR	T NO)
	1 1	I VI V	1 1 1	1 1		>5006-185
OESERVATION	PRES-	PRE	AST	1	PR	P
NUMBER OF VEH	0-125	2	0	10	10.0	oi 🗀
SPEED (MPH)	52 = 6	29765-3	6C ± 1		27-12	411
SIANDAKD DEVIALIO	0 0 0	V.	•1	0 5 6 15	<u></u>	05-0-5-0-63-
29137	0				0	
34 MP	0 0		0	0	0	0
39.3	0	0 3	00		1	
A 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4	- 5 = 5 5	0	7-23	•1	9-1-0-
LEI-KAT	12.			74 17 1	× 100	2 9 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
ELING 59 M	0 55 9	9 2 3	•		7 2 2 9 0	0 75.42
T 0R 64 M	200		2	0 95.1	M	
9 MP	93.	9	i ←i		12	
W-72	- 66	6	100	7 66 - 3	6	
E I	100			01	2	-
Z 2	1000	١٠)		0 100 0	01	_
DINGLES TO SEE	* 777				5	_
MEER OF VE	1		111			-00
AVERAGE SPEED	69-65		0 61.45		0 57.85	0 55.24
DIRECTION SB			i i	1	i i	1
NUMBER OF VE	12				0 56	0 25
AVERAGELSPEE	59-	-27-23	2257-40:-	£_56.18_	19-95-01	- 55 - 67



TABLE_12__SPEED DATA

STATION2L_62	HIGHWAY	SR 64	LCCAT	ICN_2.75_F	miles eas	t of Gibs	on-Pike C	ounty_Li	ne	1
NO. OF LANES2	TYP	E CF SURFACE	Aspha	1		3	EATHER_CT	og - Kpno	- J- P-	
THIS CESERVA DATE_11 TIME_9:	110N 13-AM12	. Н М М М М		LAST PR DA TI	EVIOUS O	BSERVATIO	N (SPEED	REPORT N	.0	•
		PASSENGER	ARIS	6 I			TRUCKS			
	BLL	INDIA	t 1 1 1 1 1 1 1 1 1	NONTENDIAN	IA.		1000	<u>ES 2</u>	2000	SOL O
PREDVATION	با بر 100	T 1 AST	- Z	uu ūū ov	T LAST	س تــ ح	о. С	ES- ENT LA	ST	H & I
UMPER OF VE			220) 			87		146
AVE. SPEED (PPH)	0 55-			8-55-0			54	-	55-0	623
TANDARD DEVIATIO	06-4		41	79750		5	-19-		•1	ω! Λ.1! ←! (
24 AP	0		0	0 4) (عاد
TIGE 75				٥١٥			0 0	0		ا ا ات ار ا
39.13) 1	0				0	- 4	0	•t
ERCENT 44 MP			4.1					-		1 = 6-
JE 651	0-1	- 01	19-1	\sim 1	5	7:				*1
EHICLES 24-MP	5	ັ •ເ	5	~ i	<u> </u>			-		-
RAVELING _ 59_MP		2.2	\sim 1 (ur il c	0			of		•1
E - 70 - 7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	220	1 × ×	210				26		0	
9 7 Z	6-1-	•1 •	10	ن اد	0.0	00		1 0		1 1
E	101		ال			0	0	- 0		*1
3 M - 48	110	0	700	O	_ :	100		-4		
9 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10	770*		100	- :	- 00 00	0	4		4
PIRECIION - EB		1	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	t			1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NUMBER OF VE		95	i	i i	7			41	0	-23-
AVERAGE SPEED	56		6 a 6	0.52.	0.0	-1	55		2	-22-
DIRECTION _ WB					1				1	1 10
UMBER OF VEHIC	- 1	0	=	1	32	g	- 10		0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
A VERA GE SPEE	053	28	100 100 100	056-	430	52 - 92	52		0 - 2	1 22



	q	ď	•	
	þ	-		
	4	a		
		_		
	4	_	١	
		1		
		ı		
		2		
	(/		
				ı
				ı
)		ı
٢		-		Į
				ì
	į	1	j	
		_	ı	
	,	~	`	
		1	٠	
	1	_		

STATIONUI=E	H16	HIGHWAY_I_6	5 SURFAC	Loca.	ocation_J	lust eas	t of Wh	ite Riv	er WEATHER	Clear		
SIH	ERVATION E 11-14-77 E 1:08-1			i J	Pí Di	ST PREV DATE TIME	1008 CB 8-1-77 10:29	SERVATI	N (SP AM E	ED REPO	0 Z	02.)
BYAILON OF VEHI	LASI ESZZS	1 1 1 2 1 10 1 1 1 2 1 10 1 1 1 2 1 10	L I ME I M	IN EN				i i i az i i a	INI AII	RESIDENT OF THE STATE OF THE ST	1 1 1 14	
00 131 131 131 131 131 131 131 131 131 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1	 	401111		101 1 1 1010			
NT			1 4 4 4 4 4		1 1 1 4 4 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				101 W1001 W1001
NAN NA		2000 2000 2000 2000 2000 2000 2000 200	100001	98 6 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11111 100000 110000 110000	ムラこうこう	SICIOIOIO	1999 - 5-199		100000000000000000000000000000000000000		
	CLES - 143 57.80 57.80		114 57 - 72 1115 1115 1115	60.151 60.151 1132 51.52 52.532	58 40	58 70 50 50 50 50 50 50 50 50 50 50 50 50 50	56-50	57 665		58 435	55-70	1 1 1 1 1 1 1 1 1 1

TABLE_14_SPEED DATA

STATICNUI=5		HIGHWAY_1-465	5	LCCA	TICN_A	LCCATION At Township Line Road Bridge	ip Lin	e Road [3ridge_			,
NO. OF LANFS_6	1	TYPE CF	SURFAC	E_Concrete	ete	1 1 1	1	3	WEATHER	Clear	1	1
THIS CESERV CATE_] TIME	Jarion 11-14-7 9:50	7 10:29 AM 11:37 AM	EB WB		LA	ST PREVI DATE_ TIME_	00S 0B	SERVATIO	N (SPE	ED REPOR	T NO	<u></u>
		SIT	12121	I IZI O					11815 1200 1200 1200		1 12	
NUMBER OF VEHICLE	<u>LASI</u> S		LAST	187 187	LAST		-LAST-	ENT	F S	- FN 62	L A S 1	
SPEED (SEED)		1414		4 a					تار ا	11		56.08- 0.016-
77777777777777777777777777777777777777	0 0	4	ب اب ا) -		-1 1 •1 1		1 j
H41818		-			C					O O		
						0		8			0	1.3
ERCENT 44 MP			3			0		•1	0			9=2-1
0 E 5 7			را ا ا] • 6 - 1 ×	ə c	16.3	بار ا ا	70 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		21.0		3 6 6 4
510 10	0	1	ا ا ا ا	200		71.42		73.3.	10	62.9	0	-22-2-
OR 64 M	0	87.	ب	86.6	O	96.4					0	- 01
62-MP	0	26		- 56.3	olo	- 56 s 4			0		0 0	a)
767		10		100.0		100.00	1 0 C) 1 1					
4 H		100.		100.0		1 0		0	0	0	0	4
5 80		100		100.0	0	100.01		ا ان	ا ا ا			•1
IRECTION EB	1	1		- 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	- 1	8			
NUMBER OF VEHICLE	<u>s</u>	-]			1	0	10	cj.	-1	0	- 27 - 27
SPEE	0	3-65-			3	-58 = 69) - - -	-57=79	0			
DINECTION JUB		16	<u></u>		10	15.		112			0	80
AVERAGE SPEED	원 - - - - -	59.10		59.39	10	57.33		55,96		58.69	0	
11 14 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	H # 	7 14 14 14 1))) (4	1 1 1 1 1 1	4	0 0 0 0 1	0		i 6 1	! 	1

TABLE_15_SPEED DATA

STATIONRI	IALL	нібнь	HIGHWAY Interstate Rural TYPE OF SURFAC	erstate al surfac	u	LOCATION	See Indi	See Individual Station		EATHER			
THIS	CBSER CATE_ TIME_	TION ct D	197	1		LA	ST PR DA	EVIOUS OBSER	OBSERVATION	(SP)	REPOR	T NO. 102	
						1 1				TRUCKS		1 1	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ALL	PDEC	IGNI	ZI Q	NON	NOIANA	ALL.	100	C)	PRES	25000-L	E S = -
OBSERVA	ICA	LAST	1 W	LAST	2 2	LAST	i W	LAST		LAST	: 1	LAST	144
UMBERLOE	l W		887	1 1	4	1 1	458			ii	1-1	0	
AVELSPEED	CHEH)		1		-61,12.	0	4	190	1.02	9-0-	0.07	0 - 61	-26-
LANDAKULU	TTTT X	30	51 72 0	ا ا ا)))) () () () ()	; ; ;			• 		
	3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	0				ات اد ا			0		0		
	34 MP	0	0						C 1		C	0	
	39	ı		0	0	O	0	Ü	0	0	0	0	0
RCENT	JW 77	0	0	ا ا ا		ا ا	CI		7	0		<u> </u>	ا ا
	49 MP	0		ا ان ا ا		ان ا ا ا	2	3	1.9	0	-2-4		8-1
EHICLES	54_M	į	2		- 1	0	3.7	Ō	9.3	0	14.3	0	0 0 0
TRAVELING	59_RP	i	400	ا ا ا ا	40 - 8		33.2	ا ا ا ا	37.8				5 <u>0</u> 0
	M- 79	0		ا ا ا ا	22 = 2-	0	25.5	33	76.90	0	80.4	Z <u>0</u> Z	4 = 9
LESS THAN	9 MP	0	⊘ I		93 - 2	O	92-1	0		0	93.5	36	79-7
	74-MP		86	ان	91	0	98.5	01	9-66	 		2	9.5
1	29 MP	0	0	ا ا ا ا	اب		100.0	0-11	0	0 - 1		01	0-0
	84_MP		0	 	110	0	100.0	C-11			10000		
	≥ 00 01 01 01 01 01 01 	ĺ	100	ا ا	110	0	100-0-			0	0000	01	

	4		
	۰		
	٩		
	_	٥	
	_		
	ш	ز	
	ш	,	
	۵		
)	
			١
	_		
	၁		ĺ
_	_		1
			i
	u		
	=		
	AR	,	
	-		

AI N I I HIMININIMI		البااا الرسا	4-Lange CF	- 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4	C C C A T T C C C A T T C C C A T T C C C A T T C C C A T C C C A T C C C C		PREVIOUS 08 11 ME July - 11 ME July - 145 - 165 - 165 - 165 - 166	SERVA 1 1 1 1 1 1 1 1 1	WE ATHER 1977 (SPEE 1977)			1 1 1 1 1 1 1 1 1 1
PERCENT OF VEHICLES TRAVELING AT OR LESS THAN 6	I EI							110099901211111111111111111111111111111			00000000000000	

TABLE__17_SPEED DATA

STATIONZELALL_	1	HIGHM	HIGHWAY_2-Lane_Rura	ne Rur	al LOCA	ATION_S	ee_Indiv	/idual	Station	S	1 1 1 1 1 2		
NO. OF LANES	1	·- !	TYPE CF	SURFA	CE	1	1 1	1	-	WEATHER	1	*	
THIS OBS DAT TIM	E OCT.	ON - Dec	. 1977	 		4 -1	ST PREV DATE TIME	July -	Sept.	ON (SPE	ED REPO	RT NO. 1	02.)
			H	SENGE	loxl≪	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 10		1 1 =	TRUC	KS		1 1 2
			PRES) 				1		N M	10	ol ol ol	PREST
- OBSERVALION	1	ASI	Z W 	LASI	Ш	LAST	H.H	LASI	Zi Wi	LAST	ZI	LASI	
NUMBER OF VEHI	LES-	d	969		905		- :	01	iv	C C	360 56 67	0 0	242
VES SEED LYCK TANDARD DEVIA	NOIL	00	180				5 5 4 9		14		1001	0	10
24	ID	0) (0		0		C	1	0	1	0	0
251	10				0	C	0				1 1	0	0
1 7			0		C	0	0	C			0	0	- F
39.	H			اب		0	0	0	•1	0	1	0	•1
CENT 44	الدا		 	L 1	1 = 2		0	ا ا ا	•1	0	•	G.	*1
F 49		0	ωi	0	7 7 8	0	1	0	9	0	2	0	- 01
EHICLES 54	H	O	9CI		001	0		C	0	0	5	0	•
VELING <u>59</u>	اے	0	65		5	0	4	C	™	اری	(20	Ō	~!
T 0R64_	0.1	0	₩ (00)	ا ا ا ا ا	*! 00	0	4		ار از س		이	0	9
S THAN 69		0	95.		5	0	2	ا اب ا ا	4 ∞i	(1) (1) (1) (1) (1)	9		0
74	ے ا	0	6	اے	6	0	0	0	01	0	o⊙	0	0
79.	ו בו		8 66	0	8 66	0	100-0-	0	-98-6-	0		0	000
 7 8		0	66		99	0	0	0	4 6)	0	Οİ	0	0
1 	اے ا	i	0	C	d	0	ان	0	ار 0	0	Oi		U



⋖
-
4
۵
~
_
E
ш
0
S
- 1
201
— I
- 1
ш
AB
4
-

	NO.102,		12 12 12 12 12 12 12 12 12 12 12 12 12 1	LAST			67-5	0	0 - 0 - 0 - 0 - 0	CA		4	9	- 28-	74.	øi	100	100 -	1001-	100	0
THER	(SPEED REPORT		기 기 기	AST	137	52	- 36	0	1	0	0		- 4	0	4(001	S	~	0	6	0 100 0	S
ual Stations	S OBSERVATION 1y = Sept 197		PRES		<u>0</u> -378	-52-	-14	00			5.	9.1		5		2	00	0		100	
See Individ	LAST PREVIOUS DATE JU	1 14	I I	ENT	062	58	5-27	1 1 1					01.6	14	56.	اه ايد ا	95	86	0	100	000
tate LCCATION URFACE	{	NIGER CAN CONTRACT CO	PRES	STENT	777		이	0	<u>ו</u>						5		i O	86	65	66	1
HIGHWAY Interst TYPE CF SU	Dec. 1977	1 1.	PRES	E E	2550	0-59-6	<u> </u>		1				1	6	53.	85	95.	 	66	66	1001
STATION_UIALL H	THIS CESERVATION DATE_OCT TIME			OBSERVATION	NUMBER OF VEHICLES	VE. SPEED (MPH)	STANDARD DEVIATIO	-24-MP	S MP	34 MP	39 MP	ERCENT 44 MP	49 MPH	EHICLES 54 MP	VELING 59 MP	0R 64 M	ESS THAN 69 MP	74 MP	d M	E 5 1 1 1 1 1 1 1 1 1	E.

	1		

•
-
•
0
۵
ш
Ų.
۵.
S
•,
1
الح
الح
-19 -19
119
91-1
LE19_
E19_

	NO ON			PRE		7	5.94	1		0	0	2 = 2	7-7				~	0.1	9	0	۰۱ ات
THER	(SPEED REPORT	į į	5000-LE	P. P	1	11	6.3			0	0	2	_ =	27	62	87.	9	5	66	0 8-660	- 66
1_Stations	CBSERVATION Sept. 197		ALL	S-	15 N 1 L	300	9		-	0	9	•	H	4 7	6	7	7	61	6	99.9	ال
ee_Individua	ST PREVIOUS DATE_July TIME	1 1	NOIA	RES-		210	N			0	0	0			-		M:	0	0	160.0	100
L CCATICN_S	r 6	CARS	⋖ i	RES-	비는	11 & 01 & 11 & 11 &	9			0	0	9	Ĭ	4-1	S	001	5	66	0	99.9	اب
ndiana ystem cr surface	1977	PASSENGER	IONI			25 - 7 - 8	20	0	0	0	0	2	0	7	6		3	0	5	9	
HIGHWAY I	TION		- 1	PRE	1 1 1	5 65 0	5.6	1			0	0	7	0 16	053	00	0 25	0 89	66	99	10
PNES	HIS CESERV. DATE_OTIME			, , , , , , , , , , , , , , , , , , ,	VALLE A	アーソたガュレル ED (ドアガ)	DEVIAL	24_MPH	29 MP	34 MP	39 MP	1 d w 5 5	4 5 MP	54 MPH	59 RP	9 M P 9	H D E	4 MP	29 MP	2T1	E1 0/1 0/1
STATION	-			((1 0 E 2 E	AVE. SPE	SIANDAR					PERCENT	0 F	EHICLE	RAVELI	0	ESS TF				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



TABLE 20
Monitoring of Speed
(Statistical Summary)

X Quarterly Report--Calendar Quarter Ending December 31, 1977

Annual Report -- Year Ending

STATE Indiana

		Number	Number	Duration of Measurement	Average	Median	85th Percentile	Perc Motoris	Percent of Motorists Exceeding	gulpa
	Miles	Monitor	Vehicles Measured	Session (Hours)	Speed (MPH)	Speed (PPH)	Speed (MPH)	SS MPH	09 МЪН	65 МРН
Interstate Urban	218	5	880	2.0	58.8	57.9	62.9	78	33	ω
Interstate Rural	849	4	1717	8.9	61.3	60.0	0.99	06	54	20
Multi-lane, Divided	657	4	1736	8.1	58.2	57.7	62.7	72	32	8
Nulti-lane, Undivided		(Include	uded in mu	ti-lane,	divided	classi	classification)			
2-Lane, Rural	8030	4	1750	8.0	56.8	56.2	62.3	59	26	8
State Total	9754	14	6083	27.0	58.7	58.2	63.7	74	36	=

1ABLE_21_

SPEED MONITORING STATION SUMMARY

STATION NUMBER_RI_6__LOCATION_J_65__7,5_miles_north.of_SR_160_ MEDIAN SPEED (MPH) _59.4_ 85TH PERCENTILE SPFED (MPH) _64.9_ NUMBER OF SESSIONS_1_DATES 11_9_77____VFHICLES FEASURED_423__ STANDARD DEVIATION _5.0_ HIGHWAY CATEGORY____INTERSIATE / RURAL___ PERCENTAGE OF VEHICLES EXCEEDING: AVERAGE SPEED (MPH) _60.2_

55 MPH _____86____6C MPH ____46____65 MPF ____15___

SPEED MONITORING STATION SUMMARY

STATION NUMBER_RITE1_LOCATION_I-69__].6_mjles_south_of_SR_J8___ MEDIAN SPEED (MPH) _59.9_ 85TH PERCENTILE SPEED (MPH) _65.6_ NUMBER OF SESSIONS_1_DATES_11-21-77___VEHICLES WEASURED_436__ AVERAGE SPEED (MPH) _65.8_ STANDARD DEVIATION _5.1_ HIGHWAY CATEGORY____INTERSIALE _ RURAL_ PERCENTAGE OF VEHICLES EXCEEDING: 55 MPH ____88____60 MPH ___50___65 MPH ___18___

SPEED MONITCRING STATION SUMMARY

HIGHWAY CATEGORY____INTERSIATE / RURAL______

STATION NUMBER_RI=22_LOCATION_I-69_7.3_miles_north_of_SR_3_interchange

NUMBER OF SESSIONS_1_DATES_11-22-77___VEHICLES PEASURED_427__

STANDARD DEVIATION _5.2. AVERAGE SPEED (MPH) _61_5_ MEDIAN SPEED (MPH) _60_6_ 85TH PERCENTILE SPEED (MPH) _66_1_

PERCENTAGE OF VEHICLES EXCEEDING:

55 MPH ______60 MPH _____55____65 MPH _____20____

11411			

SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORYINTERSTATERURAL_STATION NUMBER_RI_26_LOCATION_I_80_8_NUMBER OF SESSIONS_1_DATES_]]=16=77AVERAGE SPEED (MPH) _62=5_ STANDAR_MEDIAN SPEED (MPH) _61=7_ 85TH PERC	ATEGORYINIERSIAIE_RURAL
SPEED (MPH) _QIEL_	0 J F F F F F F F F F F F F F F F F F F
PERCENTAGE OF VEHICLES EXCEEDING:	EDING:

55 MPH _____84____6C MPH ____64____65 MPH _____85_

TABLE_25_

SPEED MONITORING STATION SUMMARY

STATION NUMBER 41-17 LOCATION U.S. 52 150 ft. east of county road 475W MEDIAN SPEED (MPH) _5646_ 85TH PERCENTILE SPEED (MPH) _6129_ NUMBER OF SESSIONS 1_DATES 11-8-77___VEHICLES FEASURED 431__ HIGHWAY CATEGORY ... MULTI-LANE . DIVIDED (RURAL) AVERAGE SPEED (MPH) _57_1_ STANDARD DEVIATION _5_8_ PERCENTAGE OF VEHICLES EXCEEDING:

55 MPH _____62____60 MPH ____28____65 MPH ____7__

	,		

TABLE_26_

SPEED MONITORING STATION SUMMARY

HIGHWAY	CATEG	0RY	"שמרוז=ר	HIGHWAY CATEGORYMULII_LANEDIVIDED_(RURAL)
STATION	NUMBE	R_4L=3	2_LOCATI	STATION NUMBER 41-32 LOCATION U.S. 30 2.9 miles west of Wanatah
NUMBER 0	F SES	SIONS	1_DATES .	NUMBER OF SESSIONS_1_DATES_11-18-77VEHICLES FEASURED_439
AVERAGE SPEED (MPH) _59.1_	SPEED	(MPH)	.59.1	STANDARD DEVIATION _ \$=2_
MEDIAN S	PEED	(MPH)	MEDIAN SPEED (MPH) _58.5_	85TH PERCENTILE SPEED (MPH) _6315_
PERCENTAGE OF VEHICLES EXCEEDING:	16E 0F	VEH I C	LES EXCE	ED I NG:

55 MPH _______60 MPH _____39_____65 MPH _____10_____

SPEED MONITORING STATION SUPMARY

STATION NUMBER_4L-1__LOCATION_U.S._4]__2.55_miles.south_of_SR_64 85TH PERCENTILE SPEED (MPH) _62_4_ NUMPER OF SESSIONS_1_DATES]]_]Q_77___VEHICLES MEASURED_428__ HIGHWAY CATEGORY____MULII-LANEZ_DIVIDED_(RURAL)_____ STANDARD DEVIATION _546_ PERCENTAGE OF VEHICLES EXCEEDING: AVERAGE SPEED (MPH) _52.9_ MEDIAN SPEED (MPH) _5723_

TABLE _28_

SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORYMULII-LANEDIVIDED_(RURAL)	HIGHWAY CASTATION NU NUMBER OF AVERAGE SE
PERCENTAGE OF VEHICLES EXCEEDING:	PERCE
SPEED (MPH) _584C_	MEDIA
SPEED (MPH) _58_6_	A V E R A (
R OF SESSIONS_1_DATES_11-17-77VEHICLES MEASURED_438	NUMBER
ON NUMBER 4L-23_LOCATION U.S. 31 3.95 miles north of Howard-Miami	STATI(
ATEGORYMULTI-LANE_DIVIDED_(RURAL)	HIGHM

55 MPH ______6C MPH _____31____65 MPH

TABLE_29_

SPEED MONITORING STATION SUMMARY

STATION NUMBER_2L_18_LOCATION_U.S._35__2.5_miles_east_of_L_69__ MEDIAN SPEED (MPH) _56_5_ 85TH PERCENTILE SPFED (MPH) _62_6_ NUMBER OF SESSIONS_1_DATES_11-21-77___VEHICLES MEASURED_444__ STANDARD DEVIATION _5.7_ HIGHWAY CATEGORY____IWO_LANEZ_RURAL_______ PERCENTAGE OF VEHICLES EXCEEDING: AVERAGE SPEED (MPH) _57.4_

55 MPH _____64____6C MPH ____26____65 MPH

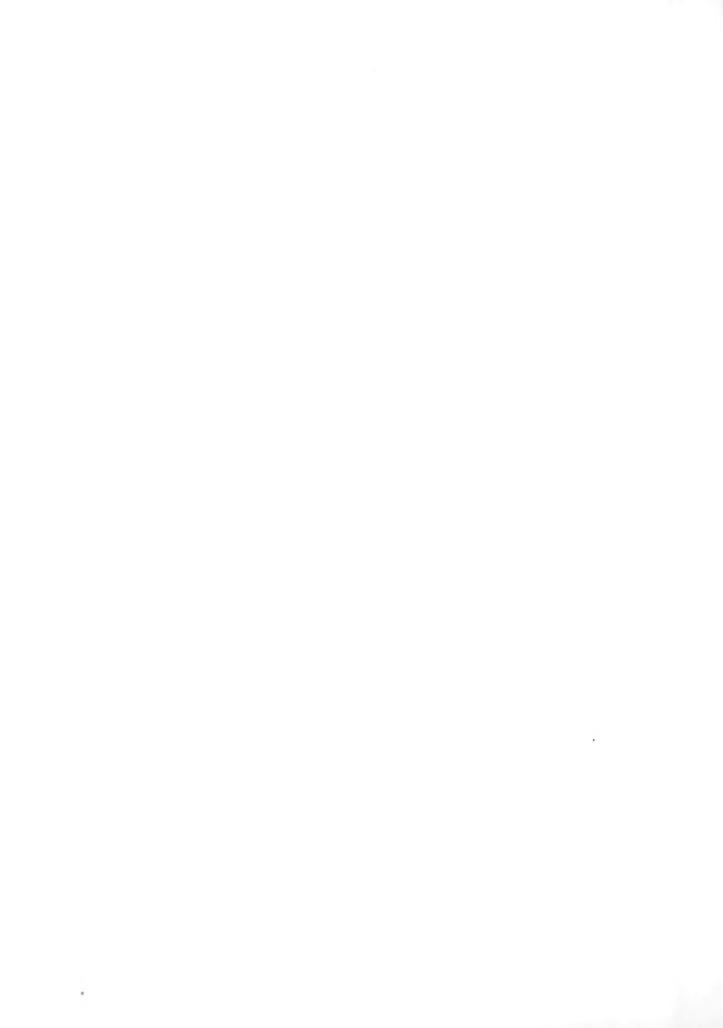


TABLE 30_

SPEED MONITORING STATICN SUMMARY

STATION NUMBER 21-54 LOCATION U.S. 231 1.1 miles south of SR 234 HIGHWAY CATEGORY____IWQ-LANEZ_RURAL______ MEDIAN SPEED (MPH) _56_2 85TH PERCENTILE SPEED (MPH) _62_6_ NUMBER OF SESSIONS_1_DATES_11-15-77___VEHICLES MEASURED_427__ AVERAGE SPEED (MPH) _52.6_ STANDARD DEVIATION _6.5. PERCENTAGE OF VEHICLES EXCEEDING:

55 MPH ____64___60 MPH ___30___65 MPH ___9___



TABLE 31_

SPEED MONITORING STATION SUPMARY

STATION NUMBER_2L_55_LOCATION__SR_6Z__5_miles_south_of_SR_39_&_67 MEDIAN SPEED (MPH) _ 27.5_ 85TH PERCENTILE SPEED (MPH) _ 62.9_ NUMBER OF SESSIONS_1_DATES_1]_1]_77___VEHICLES MEASURED_418__ AVERAGE SPEED (MPH) _58_4_ STANDARD DEVIATION _5_8_ HIGHWAY CATEGORY____IWO_LANEZ_RURAL_____ PERCENTAGE OF VEHICLES EXCEEDING:

55 MPH _______6C MPH _____33____65 MPF _____11___

		,		
	à			

TABLE 32_

SPEED MONITORING STATION SUPPARY

WOLLANEZ RURAL	STATION NUMBER_2L_63_LOCATION_SR 64 2.75 miles east of Gibson-Pike	NUMBER OF SESSIONS_1_DATES_11-10-77VEHICLES MEASURED_461	54.1_ STANDARD DEVIATION _6.5.	MEDIAN SPEED (MPH) _53_4_ 85TH PERCENTILE SPEED (MPH) _6C_3_	S EXCEEDING:
HIGHWAY CATEGORYIWG_LANEL_RURAL	STATION NUMBER_ZL_63_LOCAT	NUMBER OF SESSIONS_1_DATES	AVERAGE SPEED (MPH) _54.1_	MEDIAN SPEED (MFH) _53.4_	PERCENTAGE OF VEHICLES EXCEEDING:

55 MPH ______ 4____ 6C MPH _____16____65 MPH _____4____

			•

TABLE 33.

SPEED MONITORING STATION SUPMARY

STATION NUMBER UITÉ L'OCATION I-65 Just east of White River -HIGHWAY CATEGORY____INTERSIATE2_URBAN_________ MEDIAN SPEED (MPH) _58_2 85TH PERCENTILE SPEED (MPH) _63_4_ NUMPER OF SESSIONS_1_DATES_11-14-77___VEHICLES MEASURED_448__ AVERAGE SPEED (MPH) _55.3_ STANDARD DEVIATION _5.3_ PERCENTAGE OF VEHICLES EXCEEDING:

55 МРН _____82___6С МРН ____36___65 МРН ____9___



TABLE 34__

SPEED MONITORING STATION SUPMARY

STATION NUMBER_UI_5__LCCATION_I-65__At_Township_Line_Road_Bridge MEDIAN SPEED (MPH) _57.5_ 85TH PERCENTILE SPEEL (MPH) _62.3_ NUMBER OF SESSIONS_1_DATES_11-14-77___VEHICLES MEASURED_432__ HIGHWAY CATEGORY____INIERSTATE2_URBAN_________ STANDARD DEVIATION _5.1_ PERCENTAGE OF VEHICLES EXCEEDING: AVERAGE SPEED (MPH) _58.2_

55 МРН ______6С МРН _____31___65 МРН _____7__



